## ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION                  | INITIALS | in No. | DATE     |  |  |
|---------------------------|----------|--------|----------|--|--|
| FEE DETERMINATION         | W) _     |        | 05-04-01 |  |  |
| O.I.P.E. CLASSIFIER       |          | .59    | 5251     |  |  |
| FORMALITY REVIEW          | 4-5      | 866    | 06.26.0  |  |  |
| RESPONSE FORMALITY REVIEW | CC       | SC114  | 9-19-01  |  |  |
|                           |          |        |          |  |  |

## INDEX OF CLAIMS

| ~ | Rejected                   | N   | Non-elected  |
|---|----------------------------|-----|--------------|
|   | Allowed                    | - 1 | Interference |
| _ | (Through numeral) Canceled | Α   | Appeal       |
|   | Restricted                 | 0   | Objected     |

|                |          |                        |            |          |            | ÷        | •••  | ••••         | •••••    | ••••   | •••••    | ••• |
|----------------|----------|------------------------|------------|----------|------------|----------|--|--------------|----------|--|----------|-----|
| _              |          | _                      |            |          |            |          |  |              |          |  | _        | 1   |
| Cla            | ıim      | L                      |            |          | ,          | Dat      | е  |              |          |  | _        | l   |
| :              | = 4      | $\mathcal{U}_{\Delta}$ | 4          | H        |            |          |  |              |          |  |          |     |
| ੀ ਛ            | Original | 124                    | TI,        | لز       |            |          |  |              |          |  |          | l   |
| Final          | ទី       | h                      | 142        | 2        | ŀ          |          |  |              |          |  |          | l   |
|                | 1        |                        | "          | ~_       |            |          |  |              |          |  |          | ١   |
| 1              | 1        | V                      | Н          | _        | H          | _        | Н  |              |          |  |          | ١   |
| H              | N.       | 2                      | H          | -        | $\vdash$   |          |  | _            | -        |  | _        | ł   |
| Ľ              | T,       | 2                      | lacksquare |          | Ш          |          | _  | -            | -        | _  |          | l   |
| <del>  -</del> | 1        | ÇŽ.                    | _          |          |            |          | <u> </u>   | _            | _        |  |          | ł   |
| 1              | P        | <u> </u>               | -          |          | Щ          |          | L  |              | _        |  |          | l   |
| 3              | T        | <u> </u>               | =          |          | Ш          |          |  | _            | Ш        |  | _        | l   |
| 2              | 1        |                        | 1          |          |            |          |  |              |          |  |          | l   |
| 1              | ₿        |                        | =          |          |            |          |  |              |          |  |          | ]   |
|                | 0        | ) ·                    |            | V        |            |          |  |              |          |  |          | 1   |
|                | 10       |                        |            | Т        |            |          |  |              |          |  |          | 1   |
| _              | 11       | _                      | -          | Н.       |            |          |  |              |          |  |          | ļ   |
| -              | 12       |                        |            | 17       | Н          |          |  | $\vdash$     | -        | Г  | Ι        | 1   |
| _              | 13       | H                      |            | o        | Н          |          |  | -            | _        |  | ┢        | ĺ   |
| <u> </u>       | 14       | ⊢                      |            | 2        | H          | -        | -  | $\vdash$     | -        | $\vdash$   | 一        | ł   |
| $\vdash$       |          | -                      | ├          | <u>~</u> | Н          |          | ⊢  | -            | H        | $\vdash$   | ┝        | ł   |
| ⊢              | 15       | _                      | ⊢          | Н,       | -          | _        | <u> </u>   | <u> </u>     | ⊢        | ⊢  | <u> </u> | ł   |
| <u> </u>       | 16       | _                      | ╙          | "        | 4-         |          | <u> </u>   | _            | ┞        |  | _        | ł   |
|                | 17       | _                      | 匚          | _        | Ш          |          | <u>_</u>   | _            | ╙        |  |          | ļ   |
| ٤              | 18       |                        | _          | 0        | L          |          | L  | L            |          |  |          | l   |
| 1              | 19       |                        |            | ı        |            |          |  |              |          | L.   |          | l   |
|                | 20       |                        |            | П        |            |          | Г  |              |          |  |          | 1   |
| $\vdash$       | 21       | ┢                      | -          | Η-       | Ħ          | -        | -  |              | -        | _  |          | 1   |
| -              | 22       | ├                      | ⊢          | ╫        | ┝          |          | ┢╌   | <del> </del> | -        | -  | $\vdash$ | 1   |
| -              | 23       | _                      | ┢          | ╫        | -          | _        | ⊢  | -            | ┪        | ┢  | ╌        | 1   |
| <u> </u>       | 24       |                        | ⊢          | H        | -          |          | ┢  | -            | ⊢        | ⊢  | ├        | ł   |
| $\vdash$       | -        |                        | ⊢          | Н        |            |          | ┝  | -            | ┢        | -  | ⊢        | 1   |
| <u> </u>       | 25       | ļ                      | _          | Ц,       |            | _        | <u> </u>   | <u> </u>     | <b>├</b> | ⊢  | ⊢        | 1   |
| <u>.</u>       | 26       | ļ                      | 乚          | -        | <u> </u>   |          | <u> </u>   | _            | L        | <u> </u>   | <u> </u> | 4   |
|                | 27       |                        |            | 0        | L          |          | <u> </u>   | <u>L</u>     | <u> </u> | Ь.   | L        | 1   |
| Ĺ              | 28       | i                      |            | V        |            |          |  | _            | L        | L  | L        | 1   |
|                | 29       | П                      |            | V        |            |          |  |              |          | İ  | l        | 1   |
|                | 30       |                        |            | ()       |            |          | П  |              |          | П  | Γ        | 1   |
| -              | 31       |                        |            | D        |            | Г        |  |              | Π        |  |          | 1   |
| ż              | 32       | t                      | t          | 7        | T          | Н        | 1  |              |          | 1-   | İ        | 1   |
| ľ              | 33       |                        | <u> </u>   | 17       | $\vdash$   | $\vdash$ | Ι-   |              | $\vdash$ | ├  | H        | 1   |
| ╢              | 34       | -                      | ŀ          | 15       | 1          | H        | <del>                                     </del> | +-           | $\vdash$ | <del>                                     </del>   | $t^-$    | 1   |
| $\vdash$       | 35       | _                      | ⊢          | 5        |            | ┝        | ╂─   | <u> </u>     | ├-       | -  | ┢╌       | 1   |
| -              |          |                        | -          | 14       | <u>k</u>   | -        | ⊢  | ├            | ⊢        | -  | ⊢        | ┨   |
| $\vdash$       | 86<br>37 | 1-                     | ⊢          | ·V       |            | _        | -  | $\vdash$     | ╄-       | -  | ⊢        | 4   |
| L              | 37       | _                      | <u> </u>   | Н        | 1          | <u> </u> | ↓_   | <u> </u>     |          | ┡  | <u> </u> | 4   |
| L              | 38       |                        |            | Ц        | ┖          | 匚        | _  | <u> </u>     | <u> </u> | _  | _        | 4   |
| L              | 39       |                        | $\perp$    | IJ       | 1_         | L        | L  | <u> </u>     | <u> </u> | $oldsymbol{ol}}}}}}}}}}}}}}}}}}$ | $\vdash$ | 1   |
|                | 40       |                        |            | I        | Γ_         |          |  |              |          |  |          | ļ   |
|                | 41       | -                      |            | ΠŤ       |            | Γ        |  | Г            | Τ        | Ī  | Π        | 1   |
| $\vdash$       | 42       | 1                      | 1          | H        | +          | -        | +  | 1            | $\vdash$ | t  | $\vdash$ | 1   |
| $\vdash$       | 43       |                        | +          | H        | +          | $\vdash$ | ╁  | +-           | +        | t  | +        | 1   |
| $\vdash$       |          |                        | ╀          | ┧        | 4-         | $\vdash$ | +-   | $\vdash$     | +-       | +-   | ╁        | 4   |
| $\vdash$       | 44       |                        | $\vdash$   | Ľ        | <i>X</i> — | <u> </u> | ╀  | -            | ┼        | Ͱ  | ₽-       | 4   |
| $\perp$        | 45       | -                      | $\vdash$   | 1        | 1          | <u>_</u> | $\vdash$   |              | $\vdash$ | 1  | 1-       | 4   |
| i              | 46       |                        | 上          | L        | <u> </u>   |          | 上  | _            | <u> </u> | <u> </u>   | 1        |     |
|                |          |                        |            | 1        | 1          | 1        | 1 -  | 1            |          | 1  | 1        |     |
| Τ              | 47       | 1                      |            | 1        | 1          | L        | L  | L            |          | L.,  | _        |     |
| F              | +        | _                      | ╀          | ┝        | ╁╌         | $\vdash$ | $\vdash$   | t            | İ        | L  |          | J   |
| E              | 47       |                        |            | -        | Ė          |          | F  | F            | F        |  |          |     |

| Cla      | im       |              |          |          |  | Dat      | e        |          |          |          |          |
|----------|----------|--------------|----------|----------|--|----------|----------|----------|----------|----------|----------|
|          | il       |              |          |          |  |          |          |          |          |          | - 1      |
| Final    | Original |              |          |          |  |          |          |          |          |          |          |
| u.       |          | -            | -        | _        |  |          |          | -        | $\dashv$ | $\dashv$ |          |
|          | 51<br>52 | _            |          |          |  | _        |          |          | $\dashv$ | -        | $\dashv$ |
| _        | 53       |              |          |          |  | _        | -        | _        |          |          | $\dashv$ |
|          | 54       | <u> </u>     |          | _        |  |          | $\vdash$ |          | -        | $\dashv$ | $\dashv$ |
| !        | 55       | -            | _        | -        | $\vdash$                               | $\vdash$ | $\vdash$ |          |          | $\dashv$ | ㅓ        |
| _        | 56       | $\vdash$     |          | ·        | -                                      |          |          |          |          |          | ヿ        |
| Т        | 57       | H            |          |          | $\vdash$                               | -        |          |          |          |          | ᅦ        |
| _        | 58       | Г            |          | _        |  | Г        |          | Г        | _        |          | $\neg$   |
|          | 59       |              |          |          |  | _        |          |          |          |          |          |
|          | 60       | _            |          |          |  |          |          |          |          |          |          |
|          | 61       |              |          |          |  |          |          |          |          | Ш        |          |
|          | 62       |              |          | _        | _                                      |          |          | <u> </u> |          |          |          |
|          | 63       | _            |          |          | _                                      |          | <u></u>  | ╙        | _        |          | Щ        |
|          | 64       | <u> </u>     |          | _        |  |          | _        | <u> </u> | _        | Ш        |          |
| <u> </u> | 65       | L            | <u> </u> | $\vdash$ | _                                      |          |          | <u> </u> | <u> </u> | Н        | Н        |
| <u> </u> | 66       | L            | _        |          | <u> </u>                               | _        | -        | -        | $\vdash$ | Н        | -        |
| <u> </u> | 67       | ├-           | ├        | <u> </u> | ├-                                     |          | ├        | -        | -        | $\vdash$ |          |
| ⊢        | 68       | L            | -        |          | -                                      | ┢        |          | ├        | ┢        | -        |          |
| ⊢        | 69       | ⊢            | ⊢        | -        | $\vdash$                               | ├        | -        | ├        | $\vdash$ | -        |          |
|          | 70       | <del> </del> | _        | ┡        | ├                                      | ⊢        | ├        | -        |          | ├        |          |
| -        | 71       | ├            |          | ⊢        | ├-                                     | ⊢        | ├        | ⊢        |          |          | Н        |
| <u> </u> | 72<br>73 | ┝            | -        | ⊢        | ├                                      | ⊢        | ├        | ╁        |          |          | H        |
| <u> </u> | 74       | -            | -        | H        | ╁╌                                     | ╁        | $\vdash$ | ┢        | ├─       | ┢        |          |
| _        | 75       | ⊢            | $\vdash$ | H        |  | ╁        | ╁╌       | $\vdash$ | -        | _        | $\vdash$ |
| <u> </u> | 76       | ┢            | $\vdash$ | _        | t                                      | H        | Т        |          | 1        |          |          |
| -        | 77       | <u> </u>     |          | _        | T                                      | T        | T        | <u> </u> | ┌        | Г        |          |
|          | 78       | T            |          |          | T                                      | T        | Г        |          |          |          |          |
|          | 79       |              |          | Г        |  | Γ        |          |          |          |          |          |
|          | 80       |              |          |          |  |          |          |          |          |          |          |
|          | 81       |              |          |          | 1_                                     |          |          |          | 乚        | L        |          |
|          | 82       | L            |          |          | <u> </u>                               | ┖        |          | 1        | L        | _        |          |
| L        | 83       | -            | $\perp$  | L        | <u> </u>                               | L        | <u> </u> | $\perp$  | <u> </u> | $\vdash$ | <u> </u> |
| _        | 84       | -            | L        | L        | ــــــــــــــــــــــــــــــــــــــ | _        | 1        |          | <u> </u> | ┡        | _        |
| <b></b>  | 85       |              | _        | _        | $\vdash$                               | 1        | <u> </u> | $\vdash$ | -        | 1        | $\vdash$ |
| <u> </u> | 86       | -            | ┝        | $\vdash$ | ╄                                      | ╀        | ┼-       | +        | ├-       | $\vdash$ | $\vdash$ |
| 1        | 88       |              | $\vdash$ | ╀        | $\vdash$                               | ╁-       | $\vdash$ | +-       | $\vdash$ | ╁        | $\vdash$ |
| $\vdash$ | 89       | ╄            | ╁        | ╀        | ╁                                      | +        | ╁        | $\vdash$ | ╁        | $\vdash$ | ╁        |
| $\vdash$ | 90       | +            | $\vdash$ | ╁        | +                                      | +        | ╁        | +        | +        | $\vdash$ | ╁        |
| $\vdash$ | 91       | -            | $\vdash$ | ╁        | $\vdash$                               | ╁        | ╁        | ╁╌       | H        | +        | $\vdash$ |
| $\vdash$ | +        | +            | $\vdash$ | ╀        | +                                      | ╁        | +        | $\vdash$ | +        | +-       | $\vdash$ |
| $\vdash$ | 93       |              | ╀        | ╁        | +                                      | ╁        | +        | $\vdash$ | $\vdash$ | +        | -        |
| -        | 94       |              | +        | $\vdash$ | +                                      | +        | 十        | $\vdash$ | $\vdash$ | 十        | T        |
| -        | 95       | -            | $\vdash$ | ✝        | t                                      | $^{+}$   | $\top$   | $\top$   | †-       | T        | Τ        |
| $\vdash$ | 96       | -            | ╁        | T        | t                                      | T        | 十        | $\top$   | T        | Τ        | Τ        |
| H        | 97       | +            | t        | T        | T                                      | T        | 1        | T        | $\vdash$ | T        | Γ        |
| Г        | 98       |              | T        | T        | T                                      | T        | T        | T        |          | Ι        |          |
| Г        | 99       | 1            | T        |          | I                                      |          | $\perp$  |          |          |          | $\Box$   |
| Г        | 100      | 9            |          |          | L                                      | Γ        | $\Box$   |          |          | $\prod$  | L        |

| Cla      | im         | Date |                |          |              |            |          |          |              |              |          |  |
|----------|------------|------|----------------|----------|--------------|------------|----------|----------|--------------|--------------|----------|--|
| Final    | Original   |      |                |          |              |            |          |          | ,            |              |          |  |
|          | 101        |      |                |          |              |            |          |          |              |              |          |  |
|          | 102        |      |                |          |              |            |          |          |              |              | П        |  |
| _        | 103        |      |                |          |              |            |          |          |              |              | П        |  |
|          | 104        |      |                |          |              |            | _        |          |              |              | П        |  |
|          | 105        |      |                |          |              |            |          |          |              |              |          |  |
|          | 106        |      |                |          |              |            |          |          |              |              |          |  |
|          | 107        |      |                |          |              |            |          |          | Γ.           |              |          |  |
|          | 108        |      |                |          |              |            |          |          |              |              |          |  |
|          | 109        |      |                |          |              |            | Ĺ.,      |          |              | L            |          |  |
|          | 110        |      |                |          | Γ.           |            |          | <u> </u> | <u> </u>     |              |          |  |
|          | 111        |      |                |          |              |            |          | L        |              |              |          |  |
| _        | 112        |      |                |          |              |            | _        | L        | _            |              | <u>L</u> |  |
|          | 113        |      |                |          |              |            |          |          | L.           | <u> </u>     | $\Box$   |  |
|          | 114        |      |                |          | <u> </u>     | _          |          | L.       | L            | Ļ            | $\vdash$ |  |
|          | 115        |      | Ш              | L_       | _            | L          | L        |          | L            | $\vdash$     | <u> </u> |  |
|          | 116        |      | <u> </u>       |          | _            | _          | <u>Ļ</u> | _        | _            | _            | $\vdash$ |  |
|          | 117        |      |                | _        | ļ            |            |          |          | Ļ.,          | ╄            |          |  |
| _        | 118        |      |                |          | L            |            | <u> </u> | <u> </u> | _            | <u> </u>     | _        |  |
| _        | 119        | -    | _              |          | <u> </u>     | <u> </u> _ | _        | 1_       | _            | ┞-           | <u> </u> |  |
|          | 120        |      | L              | L        |              | L          | <u> </u> | <u> </u> | L            |              | <u> </u> |  |
|          | 121        | +    | lacksquare     | _        | <u> </u>     |            | <u> </u> | <u> </u> | <u> </u>     | L            | ļ        |  |
|          | 122        |      | <u> </u>       | _        | <u> </u>     | ╙          | <b> </b> | <u> </u> | <u> </u>     | ╄            | ₋        |  |
|          | 123        |      | <u> </u>       | _        | <u> </u>     | <u> </u>   |          | Ļ        | ļ.           | ╄            | ╄-       |  |
| _        | 124        |      | ┞              | _        | <del> </del> | <u> </u>   | ├-       | -        | ├-           | ╀            | ╁        |  |
|          | 125        |      | ⊢              | _        | -            | ├          | -        | ⊢        | ╀            | ╀            | ╁        |  |
| -        | 126<br>127 | -    | ┝╌             | H        | ⊢            | ├          | 1        | ┢        | ╁            | ╁            | $\vdash$ |  |
| _        | 128        |      | $\vdash$       | -        | ├            | ┝          | ╁        | $\vdash$ | ╁╴           | +            | ┼        |  |
| _        | 129        | _    | H              | ├        | $\vdash$     | ┢          | ╁        | $\vdash$ | ╁            | ╁            | $\vdash$ |  |
| -        | 130        | -    | $\vdash$       | -        | $\vdash$     | ┢          | ╁╌       | ╁╌       | 1            | +            | $\vdash$ |  |
| ┝        | 13         | -    | ╁              | ┢        | -            | 十          | +        | ╁╴       | T            | 十            | $\vdash$ |  |
| ┝        | 132        |      | ┼─             | $\vdash$ |              | H          | t        | t        | ┿            | T            | $\vdash$ |  |
| H        | 133        |      |                | 1        |              |            | T        | Г        | T            | T            | T        |  |
| H        | 134        |      | 1              | _        | T            | 1          | 1        | T        | T            | T            | $\top$   |  |
| -        | 13         | 1    | 1              |          | $\vdash$     | Т          | T        | 1        |              | Τ            | Τ        |  |
|          | 136        | 1    | Г              | Π        | T            | Π          |          |          | Г            |              | T        |  |
| Γ.       | 137        | 1    |                |          |              |            |          | $\Box$   | $\perp$      |              |          |  |
|          | 138        |      |                |          |              | L          | L        |          | $\perp$      | L            | ↓_       |  |
| _        | 139        |      |                |          |              |            | _        | ┖        | ↓_           | ╄            |          |  |
| L        | 140        |      |                | L        |              | _          | $\perp$  | L        | L            | L            | _        |  |
|          | 14         | 1    | <u>_</u>       |          |              | <u>L</u>   | L        | L        | 上            | L            | _        |  |
|          | 14         |      |                |          |              |            |          |          | L            | Ļ            |          |  |
|          | 14         |      | _              | L        | L            | L          | L        | L        | ↓.           | $\perp$      | $\perp$  |  |
| L        | 14         | 4    |                | L        | $\perp$      | L          | L        | L        | $\perp$      | $\downarrow$ | $\perp$  |  |
| L        | 14         |      | 1              | L        | opeq         | L          | $\perp$  | $\perp$  | $\downarrow$ | ╄            | $\bot$   |  |
| L        | 146        | 3    | <u> </u>       | 1        | $\perp$      | ot         | 1_       | 1        | 1            | ╀            | $\perp$  |  |
| L        | 14         | 1_   | <del> </del> _ | $\vdash$ | $\perp$      | $\perp$    | 4        | 1        | 4            | +            | $\perp$  |  |
| _        | 14         | В    | ┺              | $\perp$  | 1            | Ļ          | $\perp$  | $\vdash$ | $\perp$      | +            | +-       |  |
| $\vdash$ | 14         | 9_   | ┼-             | $\vdash$ | +            | 1          | ╀        | +        | +            | +            | +        |  |
| _        | p 5        | 4    |                |          | <u> </u>     | <u> </u>   |          | 1_       |              |              |          |  |
|          |            |      |                |          |              |            |          |          |              |              |          |  |

J. p. 16/26

If more than 150 claims or 10 actions staple additional sheet here

(LEFT INSIDE)

BEST AVAILABLE COPY